AD-A048 273 ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2
METEOROLOGICAL DATA REPORT. 12828F LANCE MISSILE NUMBER 2215, R--ETC(U)
OCT 77

UNCLASSIFIED DR-947 NL

| OF |
AD
A048 273

END
DATE
FILMED
| -78
DDC

DR-947
October 1977
AD

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

12

AD A048273

6

METEOROLOGICAL DATA REPORT

12828F LANCE
MISSILE ~~NO.~~ 2215, ROUND NO. 302 RSL
(6 OCTOBER 1977)

Number

Number

BY

~~WSMR METEOROLOGICAL TEAM~~

11 Oct 77

12 35p.

14 DR-947

16 1T665702D127

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

17 02

400 844

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR-947	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12828F Fance Missile Number 2215, Round Number 302 RSL		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) WSMR Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA Task 1T665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Command Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico		12. REPORT DATE October 1977 13. NUMBER OF PAGES 38
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) US Army Electronics Command Ft. Monmouth, New Jersey		15. SECURITY CLASS. (of this report) UNCLASSIFIED 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

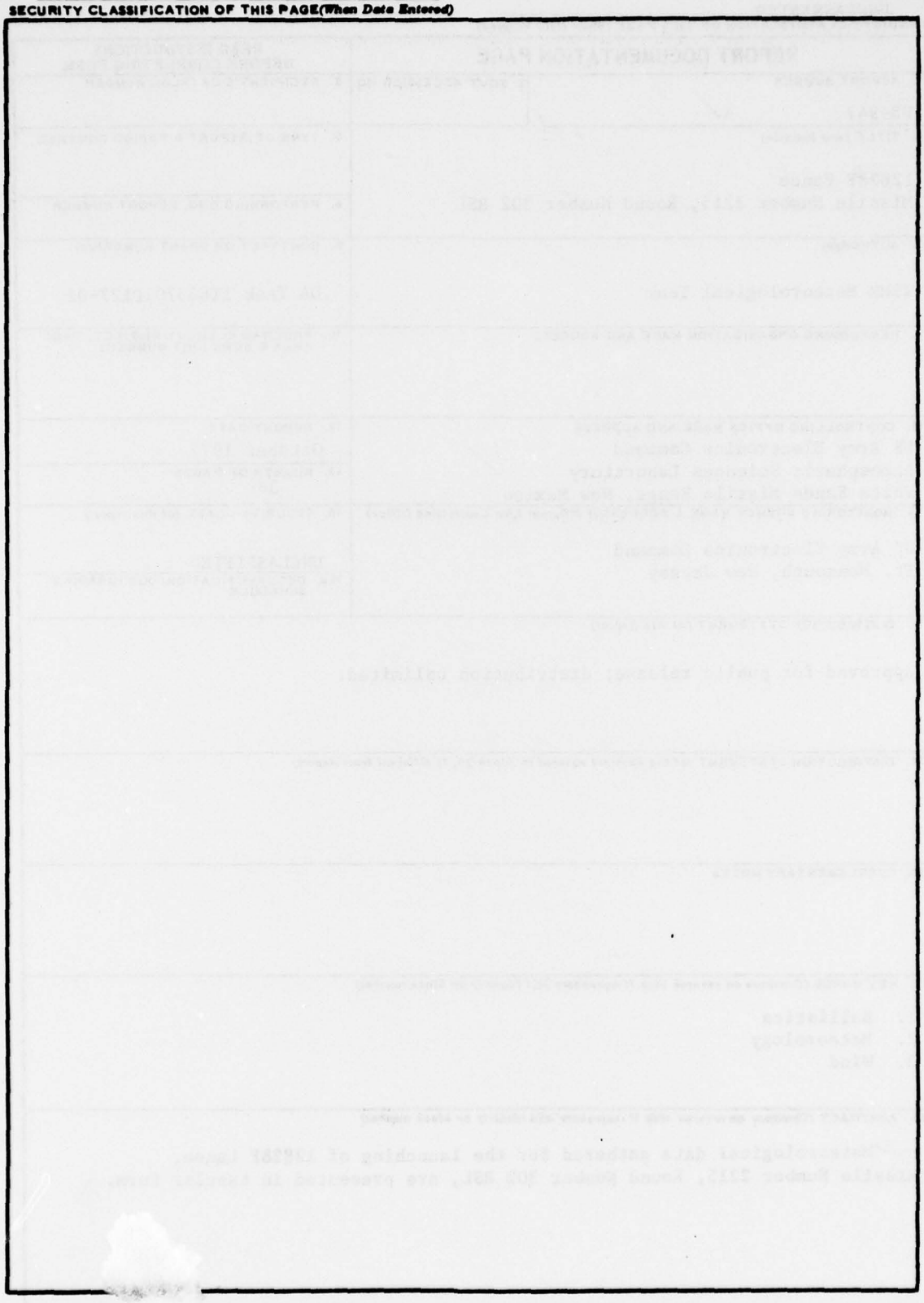
1. Ballistics
2. Meteorology
3. Wind

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 12828F Lance, Missile Number 2215, Round Number 302 RSL, are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)



CONTENTS

INTRODUCTION

12828F Lance, Missile Number 2215, Round Number 302 RSL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0849 HRS MDT, 6 October 1977. The scheduled launch time was 0830 HRS MDT.

DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	3,980	FEET/MSL
PRESSURE	884.9	MBS
TEMPERATURE	20.5	°C
RELATIVE HUMIDITY	86	%
DEW POINT	18.1	°C
DENSITY	1,040	GM/M^3
WIND SPEED/DIR	CALM	MPH/DEG
CLOUD COVER	10	Ac

TABLE I. SURFACE OBSERVATIONS TAKEN AT LC-33, 0845 HRS MDT/6 OCTOBER 1977.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	CALM	CALM
100	225	1.5
200	225	3.0
300	230	4.5
400	230	5.5
500	225	6.5
600	225	7.0
700	205	6.0
800	185	7.0
900	175	5.5
1000	175	5.5
1100	150	10.0
1200	160	12.0
1300	150	11.0
1400	155	11.0
1500	160	10.0
1600	170	9.0
1700	170	9.0
1800	185	8.0
1900	185	8.0
2000	170	6.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
2100	180	7.0
2200	185	7.5
2300	185	7.5
2400	180	5.0
2500	180	4.5
2600	170	6.5
2700	175	7.5
2800	190	11.0
2900	180	10.0
3000	155	11.0
3100	160	10.0
3200	165	12.0
3300	170	10.0
3400	170	9.0
3500	175	12.0
3600	175	13.0
3700	170	12.0
3800	170	11.0
3900	190	10.0
4000	190	11.0
4100	185	11.0

TABLE II. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM LC-33, AT 0836 HRS MDT/6 OCTOBER 1977
12828F LANCE, MISSILE NO. 2215, ROUND NO. 302 RSL

PIBAL RELEASE POINT WSTM COORDINATES:

X = 486,296.83 Y = 185,251.85 Z = 3,986.67

APPROXIMATELY: 815 FEET SE OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	190	9.0
4300	200	14.0
4400	195	14.0
4500	195	14.0
4600	185	14.0
4700	200	16.0
4800	190	13.0
4900	200	14.0
5000	205	12.0
5100	210	10.0
5200	210	9.0
5300	205	9.0
5400	200	8.0
5500	195	10.0
5600	200	8.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
5700	210	10.0
5800	220	8.0
5900	230	8.0
6000	215	8.0
6100	215	7.0
6200	210	10.0
6300	205	8.0
6400	220	8.0
6500	215	10.0
6600	220	12.0
6700	210	12.0
6800	200	11.0
6900	215	10.0
7000	210	10.0
7100	210	10.0

TABLE II. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	CALM	CALM
100	204	1.0
200	207	1.0
300	212	2.0
400	217	2.5
500	200	3.0
600	180	3.5
700	161	5.5
800	143	7.5
900	143	8.5
1000	143	10.0
1100	145	10.5
1200	148	11.0
1300	148	11.0
1400	148	11.0
1500	156	10.0
1600	167	9.0
1700	174	9.0
1800	180	8.5
1900	184	8.0
2000	188	7.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
2100	186	8.0
2200	184	8.0
2300	182	8.0
2400	180	8.5
2500	180	8.5
2600	180	8.5
2700	176	9.0
2800	171	9.5
2900	166	10.0
3000	162	10.0
3100	161	11.0
3200	161	12.0
3300	165	13.0
3400	168	14.5
3500	169	14.0
3600	171	13.0
3700	173	11.5
3800	175	10.5
3900	180	11.0
4000	185	12.0
4100	184	13.0

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 2
RELEASED FROM LC-33, AT 0849 HRS MDT/6 OCTOBER 1977
12828F LANCE, MISSILE NO. 2215, ROUND NO. 302 RSL

PIBAL RELEASE POINT WSTM COORDINATES:

X = 486,296.83 Y = 185,251.85 Z = 3,986.67

APPROXIMATELY: 815 FEET SE OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	182	13.0
4300	184	12.5
4400	185	12.0
4500	188	11.5
4600	190	11.0
4700	195	11.0
4800	200	11.5
4900	199	11.0
5000	199	10.5
5100	194	9.5
5200	180	9.0
5300	180	8.0
5400	180	7.0
5500	190	8.0
5600	201	8.5
5700	207	8.0
5800	212	7.5
5900	212	7.5
6000	212	7.5
6100	211	8.0
6200	210	8.0
6300	207	8.0
6400	204	8.5
6500	196	9.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
6600	189	9.0
6700	194	9.0
6800	198	9.5
6900	200	10.0
7000	203	10.5
7100	202	11.0
7200	202	11.0
7300	201	11.5
7400	200	11.5
7500	202	12.0
7600	203	13.0
7700	206	14.0
7800	208	14.5
7900	211	15.5
8000	213	16.5
8100	215	17.0
8200	217	17.5
8300	220	18.5
8400	224	19.5
8500	228	20.0
8600	231	20.5
8700	231	20.5
8800	231	20.5
8900	229	20.5

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
9000	227	20.5
9100	226	20.0
9200	224	20.0
9300	225	20.5
9400	227	20.5
9500	229	21.5
9600	231	22.0
9700	231	22.0
9800	231	22.5
9900	233	22.5
10000	234	23.0
10100	236	23.5
10200	238	23.5
10300	238	24.0
10400	238	25.0
10500	238	25.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
10600	238	24.5
10700	235	26.0
10800	233	27.5
10900	232	27.0
11000	231	27.0
11100	230	26.0
11200	230	25.5
11300	229	26.5
11400	229	27.5
11500	230	28.0
11600	230	28.0
11700	229	28.0
11800	228	28.5
11900	227	28.5
12000	226	28.5

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

STATION ALTITUDE 5951.40 FEET MSL
6 OCT. 77 0730 HRS MDT
ASCENSION NO. 105

SIGNIFICANT LEVEL DATA
2790050105
APACHE
TABLE IV.

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
885.2	5951.4	17.2	16.2	94.0
871.8	4384.8	18.0	15.8	87.0
850.0	5098.2	17.6	14.3	81.0
775.8	7650.9	13.7	12.1	90.0
756.3	8356.0	13.0	8.7	75.0
746.3	8723.7	12.6	8.5	76.0
700.0	10478.9	9.0	1.9	61.0
605.3	14381.5	1.9	-2.2	74.0
588.3	15134.1	.6	-6.0	61.0
554.8	16668.4	-3.1	-5.9	81.0
544.8	17140.8	-3.6	-4.4	94.0
520.8	18304.4	-5.9	-9.8	74.0
500.0	19348.3	-7.9	-8.3	97.0
472.8	20768.4	-10.4	-12.1	87.0
400.0	24917.1	-19.4	-22.0	80.0
377.8	26299.0	-22.5	-42.6	14.0
353.8	29243.8	-27.8	-49.9	10.0
308.3	31097.4	-31.9		
300.0	31727.6	-32.6		
250.0	35841.5	-42.8		
200.0	40639.2	-54.6		
159.8	45196.3	-67.5		
150.0	46434.2	-70.1		
140.8	47655.8	-72.9		

STATION ALTITUDE 5951.40 FEET MSL
6 OCT. 77 0730 HRS MDT
ASCENSION NO. 165

UPPER AIR DATA
2790050165
APACHE
TABLE V.

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
5951.4	885.2	17.2	16.2	94.0	1053.7	666.5	.0	.0	1.000318
6000.0	880.7	17.3	16.2	93.2	1051.6	666.6	175.4	.3	1.000317
6500.0	868.2	17.9	15.6	86.0	1031.1	667.2	175.4	3.5	1.000309
7000.0	855.8	17.7	14.5	81.8	1014.3	666.8	175.4	6.7	1.000300
7500.0	837.9	17.0	14.0	82.4	998.8	666.0	175.4	10.0	1.000295
8000.0	823.0	16.2	13.5	84.2	983.7	665.1	175.2	12.9	1.000290
8500.0	808.4	15.5	13.1	85.9	968.9	664.2	173.9	13.9	1.000285
9000.0	794.1	14.7	12.7	87.7	954.3	663.3	173.2	14.3	1.000280
9500.0	780.0	13.9	12.2	89.5	940.0	662.4	173.2	13.1	1.000275
10000.0	766.1	13.4	10.5	82.6	925.7	661.5	174.5	11.2	1.000265
10500.0	752.4	12.8	8.6	75.4	911.3	660.7	178.9	8.4	1.000255
11000.0	738.8	12.0	7.5	73.6	897.7	659.6	184.0	6.8	1.000248
11500.0	725.5	11.0	5.6	69.4	885.2	658.3	187.1	6.5	1.000240
12000.0	712.3	10.0	3.7	65.1	872.7	656.9	189.2	6.9	1.000232
12500.0	699.4	9.0	1.9	61.1	860.4	655.6	190.6	7.7	1.000225
13000.0	686.5	8.1	1.4	62.7	847.4	654.5	201.6	8.3	1.000221
13500.0	673.9	7.1	.9	64.4	834.5	653.4	212.2	9.3	1.000217
14000.0	661.4	6.2	.4	66.1	821.8	652.3	223.1	10.9	1.000214
14500.0	649.2	5.3	-.1	67.7	809.3	651.3	228.0	12.8	1.000210
15000.0	637.3	4.4	-.7	69.4	797.1	650.2	229.3	14.6	1.000206
15500.0	625.5	3.5	-1.2	71.1	785.0	649.1	226.7	16.0	1.000203
16000.0	614.0	2.6	-1.8	72.7	773.1	648.0	223.5	17.3	1.000199
16500.0	602.6	1.7	-2.8	72.0	761.4	646.9	221.2	17.2	1.000195
17000.0	591.3	.8	-5.3	63.3	749.8	645.7	218.8	17.3	1.000188
17500.0	580.1	-.3	-5.9	65.8	738.7	644.4	216.3	17.7	1.000185
18000.0	569.2	-1.5	-5.8	72.3	727.9	643.0	218.7	18.6	1.000183
18500.0	558.4	-2.7	-5.8	78.8	717.3	641.5	223.3	19.5	1.000180
19000.0	547.8	-3.5	-4.8	90.1	705.4	640.7	232.2	19.8	1.000179
19500.0	537.3	-4.3	-6.0	87.8	694.3	639.6	241.2	20.1	1.000175
20000.0	527.0	-5.3	-8.3	79.2	683.8	638.3	250.5	20.5	1.000170

STATION ALTITUDE 3951.40 FEET MSL
6 OCT. 77 0730 HRS MDT
ASCENSION NO. 105

UPPER AIR DATA
2790050105
APACHE
TABLE V. (CONT)

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
18500.0	516.8	-6.3	-9.4	78.3	673.2	637.1	255.9	22.1	1.000166
19000.0	506.8	-7.2	-8.7	89.3	662.4	636.0	259.3	23.8	1.000165
19500.0	497.0	-8.2	-8.7	95.9	651.8	634.9	258.9	25.0	1.000162
20000.0	487.3	-9.0	-10.0	92.4	641.4	633.8	258.0	25.4	1.000158
20500.0	477.8	-9.9	-11.4	88.9	631.1	632.7	256.4	25.0	1.000155
21000.0	468.4	-10.9	-12.7	86.6	621.1	631.5	254.3	24.6	1.000151
21500.0	459.1	-12.0	-13.9	85.8	611.3	630.1	251.8	24.2	1.000148
22000.0	449.9	-13.1	-15.1	84.9	601.7	628.8	247.3	24.2	1.000145
22500.0	440.9	-14.2	-16.2	84.1	592.2	627.4	243.8	24.6	1.000142
23000.0	432.1	-15.2	-17.4	83.2	582.9	626.1	241.3	25.5	1.000139
23500.0	423.5	-16.3	-18.6	82.4	573.7	624.7	243.2	26.9	1.000136
24000.0	415.1	-17.4	-19.8	81.5	564.7	623.4	246.4	28.7	1.000133
24500.0	406.8	-18.5	-21.0	80.7	555.9	622.0	250.4	32.0	1.000131
25000.0	398.6	-19.6	-22.7	76.0	547.2	620.6	253.9	35.7	1.000128
25500.0	390.5	-20.7	-27.9	52.2	538.5	619.2	255.9	36.7	1.000124
26000.0	382.5	-21.8	-35.2	28.3	530.0	617.7	257.7	36.2	1.000120
26500.0	374.6	-22.9	-43.0	13.7	521.3	616.4	259.6	34.3	1.000117
27000.0	366.8	-23.8	-44.2	13.0	512.4	615.3	261.8	35.9	1.000115
27500.0	359.2	-24.7	-45.5	12.4	503.5	614.1	262.6	38.0	1.000113
28000.0	351.7	-25.6	-46.7	11.7	494.8	613.0	262.5	40.4	1.000111
28500.0	344.4	-26.5	-48.0	11.0	486.3	611.9	262.2	42.6	1.000109
29000.0	337.2	-27.4	-49.2	10.3	477.9	610.8	262.5	44.5	1.000107
29500.0	330.2	-28.4	-51.6	8.6**	469.8	609.5	263.4	46.2	1.000105
30000.0	323.2	-29.5	-55.5	5.9**	462.0	608.1	263.7	46.0	1.000103
30500.0	316.3	-30.6	-61.1	3.2**	454.2	606.8	264.1	45.6	1.000101
31000.0	309.6	-31.7	-74.5	.5**	446.6	605.4	264.7	45.1	1.000099
31500.0	303.0	-32.3			438.3	604.5	264.7	46.2	1.000098
32000.0	296.4	-33.3			430.5	603.4	264.5	48.0	1.000096
32500.0	289.9	-34.5			423.2	601.8	263.6	50.3	1.000094
33000.0	283.6	-35.8			416.1	600.2	262.9	51.8	1.000093

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.40 FEET MSL
6 OCT. 77 0730 HRS MDT
ASCENSION NO. 105

UPPER AIR DATA
279005010
APACHE
TABLE V. (CONT)

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
33500.0	277.3	-37.0			409.1	598.7	262.1	51.9	1.000091
34000.0	271.3	-38.2			402.3	597.1	262.0	52.4	1.000090
34500.0	265.3	-39.5			395.5	595.5	262.4	53.3	1.000088
35000.0	259.5	-40.7			388.9	593.9	263.6	56.1	1.000087
35500.0	253.8	-42.0			382.4	592.4	264.7	59.2	1.000085
36000.0	248.2	-43.2			375.9	590.8	265.5	62.8	1.000084
36500.0	242.5	-44.4			369.3	589.2	266.3	63.5	1.000082
37000.0	236.9	-45.6			362.7	587.6	266.8	62.8	1.000081
37500.0	231.4	-46.9			356.3	586.0	266.7	60.6	1.000079
38000.0	226.1	-48.1			350.0	584.4	266.4	59.7	1.000078
38500.0	220.9	-49.3			343.9	582.8	266.2	59.9	1.000077
39000.0	215.8	-50.6			337.8	581.2	266.4	63.0	1.000075
39500.0	210.9	-51.8			331.9	579.6	266.0	66.5	1.000074
40000.0	206.0	-53.0			326.1	578.0	264.7	70.7	1.000073
40500.0	201.3	-54.3			320.4	576.4	263.6	73.0	1.000071
41000.0	196.5	-55.6			314.7	574.8	262.7	73.5	1.000070
41500.0	191.7	-57.0			309.0	572.7	263.3	72.2	1.000069
42000.0	187.0	-58.5			303.5	570.8	264.1	70.0	1.000068
42500.0	182.5	-59.9			298.1	568.9	264.7	66.3	1.000066
43000.0	178.1	-61.3			292.8	567.1	265.0	65.0	1.000065
43500.0	173.7	-62.7			287.6	565.2	265.1	64.9	1.000064
44000.0	169.5	-64.1			282.5	563.3	266.1	67.2	1.000063
44500.0	165.4	-65.5			277.5	561.3	267.3	69.0	1.000062
45000.0	161.4	-66.9			272.6	559.4	269.2	69.8	1.000061
45500.0	157.3	-68.1			267.4	557.8	270.4	70.8	1.000060
46000.0	153.4	-69.2			261.9	556.4	271.1	71.9	1.000058
46500.0	149.5	-70.3			256.7	554.9			1.000057
47000.0	145.7	-71.4			251.5	553.4			1.000056
47500.0	141.9	-72.5			246.5	551.8			1.000055

STATION ALTITUDE 5951.40 FEET MSL
6 OCT. 77 0730 HRS MDT
ASCENSION NO. 105

MANDATORY LEVELS
279005105
APACHE
TABLE VI.

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	5097.	17.6	14.3	81.	175.4	7.4
800.0	6796.	15.0	12.9	87.	175.3	14.6
750.0	8587.	12.7	6.6	76.	180.0	7.9
700.0	10479.	9.0	1.9	81.	190.5	7.7
650.0	12483.	5.4	-.1	68.	228.0	12.8
600.0	14616.	1.5	-3.4	70.	220.6	17.2
550.0	16900.	-3.3	-5.2	87.	230.6	19.7
500.0	19357.	-7.9	-8.3	97.	259.0	24.7
450.0	22020.	-13.1	-15.0	85.	246.9	24.2
400.0	24935.	-19.4	-22.0	80.	253.7	35.5
350.0	28149.	-25.8	-47.0	12.	262.4	41.2
300.0	31761.	-32.6			264.6	47.3
250.0	35886.	-42.8			265.5	62.4
200.0	40699.	-54.6			263.1	73.2
175.0	43455.	-62.3			265.2	65.1
150.0	46516.	-70.1				

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

SIGNIFICANT LEVEL DATA
2790010704
HOLLOMAN
TABLE VII.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
880.1	4126.6	15.0	11.8	81.0
868.8	4492.5	17.9	15.5	86.0
850.0	5111.2	19.9	15.5	76.0
741.8	8909.9	10.5	9.6	94.0
723.3	9601.5	10.1	7.3	83.0
713.8	9962.7	9.8	2.6	61.0
700.0	10494.4	8.9	1.6	60.0
660.8	12055.3	6.8	.0	62.0
584.8	15311.2	.3	-5.9	63.0
549.9	16919.6	-3.5	-5.2	88.0
525.9	18073.0	-5.5	-11.0	65.0
500.0	19365.6	-8.4	-11.7	77.0
477.8	20520.5	-8.8	-15.5	58.0
414.3	24079.6	-17.8	-22.8	65.0
411.7	24234.1	-17.2	-27.0	42.0
400.0	24940.2	-18.7	-27.6	45.0
389.3	25601.0	-19.7	-27.6	49.0
387.5	25713.6	-19.9	-32.3	32.0
383.3	25978.3	-20.1	-36.7	21.0
311.3	30920.5	-30.8	-48.8	15.0
300.0	31776.0	-32.7		
250.0	35895.0	-42.1		
200.0	40711.8	-53.5		
174.8	43492.8	-61.5		
150.0	46539.4	-68.8		
142.3	47566.0	-70.4		
125.3	50048.4	-68.1		
106.3	53251.4	-71.0		
100.0	54435.6	-70.0		
82.8	58072.4	-73.3		

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

SIGNIFICANT LEVEL DATA
2790010704
HOLLOMAN
TABLE VII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
70.0	61354.4	-64.1		
55.3	66097.0	-61.1		
50.0	68157.9	-56.9		
30.0	78801.2	-52.9		
20.0	87365.1	-50.5		
14.3	94558.8	-45.8		
10.0	102333.7	-44.0		

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4126.6	880.1	15.0	11.8	81.0	1057.7	663.3	.0	.0	1.000299
4500.0	868.6	17.9	15.5	85.9	1031.5	667.2	168.9	3.1	1.000309
5000.0	853.3	19.5	15.6	77.8	1007.7	669.1	168.9	7.1	1.000303
5500.0	838.2	18.9	15.0	77.8	992.0	668.4	168.9	11.2	1.000297
6000.0	823.3	17.7	14.2	80.2	978.8	666.9	170.0	13.8	1.000291
6500.0	808.7	16.5	13.5	82.6	965.7	665.4	172.8	14.0	1.000285
7000.0	794.4	15.2	12.7	84.9	952.9	663.9	175.9	14.0	1.000279
7500.0	780.3	14.0	11.9	87.3	940.2	662.4	179.6	13.8	1.000274
8000.0	766.4	12.8	11.1	89.7	927.7	660.9	181.5	13.2	1.000268
8500.0	752.8	11.5	10.3	92.1	915.4	659.4	181.0	12.2	1.000263
9000.0	739.4	10.4	9.3	92.6	902.8	658.0	183.9	10.4	1.000256
9500.0	726.0	10.2	7.7	84.6	887.8	657.5	192.8	8.1	1.000247
10000.0	712.8	9.7	2.6	60.9	874.4	656.5	203.1	6.9	1.000230
10500.0	699.9	8.9	1.6	60.0	861.2	655.5	214.0	6.4	1.000225
11000.0	687.1	8.2	1.1	60.6	847.6	654.7	218.4	8.4	1.000220
11500.0	674.5	7.5	.6	61.3	834.1	653.9	221.2	10.7	1.000217
12000.0	662.2	6.9	.1	61.9	820.9	653.1	226.8	13.6	1.000213
12500.0	649.9	5.9	-.8	62.1	808.5	651.9	230.5	15.9	1.000208
13000.0	637.8	4.9	-1.7	62.3	796.5	650.7	234.0	16.6	1.000204
13500.0	625.9	3.9	-2.6	62.4	784.6	649.5	235.8	17.3	1.000200
14000.0	614.3	2.9	-3.5	62.6	772.9	648.2	233.0	18.3	1.000196
14500.0	602.9	1.9	-4.4	62.8	761.4	647.0	230.1	19.2	1.000192
15000.0	591.7	.9	-5.3	62.9	750.1	645.8	226.9	20.0	1.000188
15500.0	580.6	-.1	-5.7	65.9	738.9	644.5	225.4	20.9	1.000185
16000.0	569.6	-1.3	-5.4	73.7	728.0	643.2	226.0	21.8	1.000183
16500.0	558.8	-2.5	-5.2	81.5	717.3	641.8	229.1	22.6	1.000181
17000.0	548.2	-3.6	-5.6	86.4	706.6	640.5	233.8	23.6	1.000178
17500.0	537.7	-4.5	-8.0	76.4	695.6	639.3	241.7	23.7	1.000173
18000.0	527.4	-5.4	-10.6	66.5	684.8	638.1	251.1	24.0	1.000167
18500.0	517.2	-6.5	-11.2	69.0	674.3	636.8	256.3	25.0	1.000164

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
19000.0	507.2	-7.6	-11.5	73.6	664.1	635.5	260.3	26.1	1.000162
19500.0	497.4	-8.4	-12.1	74.8	653.4	634.4	258.4	27.6	1.000159
20000.0	487.7	-8.6	-13.7	66.6	641.2	634.1	256.2	29.1	1.000154
20500.0	478.2	-8.8	-15.5	58.3	629.2	633.9	253.4	29.8	1.000150
21000.0	468.7	-10.0	-16.5	58.9	619.7	632.4	250.7	30.4	1.000147
21500.0	459.4	-11.3	-17.5	59.9	610.4	630.8	249.3	31.3	1.000145
22000.0	450.3	-12.5	-18.5	60.9	601.2	629.3	248.1	32.2	1.000142
22500.0	441.4	-13.8	-19.5	61.9	592.2	627.7	249.1	32.1	1.000139
23000.0	432.6	-15.1	-20.5	62.9	583.3	626.2	250.7	31.9	1.000137
23500.0	424.0	-16.3	-21.6	63.9	574.6	624.6	254.7	31.4	1.000134
24000.0	415.6	-17.6	-22.6	64.8	566.1	623.1	258.2	31.6	1.000132
24500.0	407.3	-17.8	-27.2	43.1	555.2	622.8	259.9	33.1	1.000127
25000.0	399.0	-18.8	-27.6	45.4	546.2	621.5	259.4	34.6	1.000125
25500.0	390.9	-19.5	-27.6	48.4	536.7	620.6	256.6	36.0	1.000123
26000.0	382.9	-20.1	-36.7	21.0	527.2	619.7	255.2	36.8	1.000119
26500.0	375.0	-21.2	-38.0	20.4	518.4	618.4	255.2	36.9	1.000117
27000.0	367.2	-22.3	-39.2	19.8	509.8	617.1	256.0	38.4	1.000115
27500.0	359.5	-23.4	-40.4	19.2	501.4	615.7	257.8	41.9	1.000113
28000.0	352.0	-24.5	-41.6	18.5	493.1	614.4	259.7	44.6	1.000111
28500.0	344.7	-25.6	-42.8	17.9	484.9	613.0	262.0	45.7	1.000109
29000.0	337.5	-26.6	-44.1	17.3	476.9	611.7	264.2	45.8	1.000107
29500.0	330.5	-27.7	-45.3	16.7	469.0	610.4	266.4	44.4	1.000105
30000.0	323.6	-28.8	-46.5	16.1	461.3	609.0	268.1	43.8	1.000103
30500.0	316.9	-29.9	-47.8	15.5	453.7	607.6	268.4	45.0	1.000102
31000.0	310.2	-31.0	-49.8	13.6**	446.2	606.3	268.4	46.3	1.000100
31500.0	303.6	-32.1	-59.1	4.8**	438.7	604.9	267.2	48.3	1.000098
32000.0	297.0	-33.2			431.3	603.5	266.2	50.4	1.000096
32500.0	290.5	-34.4			423.8	602.0	264.1	52.3	1.000094
33000.0	284.2	-35.5			416.6	600.6	262.1	54.4	1.000093
33500.0	278.0	-36.6			409.4	599.1	261.7	55.0	1.000091

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
34000.0	271.9	-37.8			402.4	597.7	261.6	55.4	1.000090
34500.0	265.9	-38.9			395.5	596.2	263.3	56.5	1.000088
35000.0	260.1	-40.1			388.7	594.8	265.6	58.1	1.000087
35500.0	254.4	-41.2			382.1	593.3	267.2	62.1	1.000085
36000.0	248.8	-42.3			375.5	591.9	268.2	67.5	1.000084
36500.0	243.1	-43.5			368.8	590.3	268.9	70.2	1.000082
37000.0	237.5	-44.7			362.2	588.8	269.3	70.5	1.000081
37500.0	232.1	-45.9			355.8	587.3	270.1	69.6	1.000079
38000.0	226.8	-47.1			349.4	585.8	271.3	67.4	1.000078
38500.0	221.6	-48.3			343.2	584.2	271.7	66.5	1.000076
39000.0	216.5	-49.4			337.2	582.7	270.7	67.9	1.000075
39500.0	211.5	-50.6			331.2	581.1	269.5	69.2	1.000074
40000.0	206.7	-51.8			325.3	579.6	267.7	70.3	1.000072
40500.0	202.0	-53.0			319.6	578.0	265.9	71.5	1.000071
41000.0	197.2	-54.3			314.0	576.3	265.1	70.5	1.000070
41500.0	192.5	-55.8			308.5	574.4	264.4	69.5	1.000069
42000.0	187.9	-57.2			303.1	572.5	263.9	68.9	1.000068
42500.0	183.4	-58.6			297.9	570.6	263.5	68.6	1.000066
43000.0	179.0	-60.1			292.7	568.7	263.3	68.9	1.000065
43500.0	174.7	-61.5			287.6	566.7	263.5	70.3	1.000064
44000.0	170.4	-62.7			282.1	565.1	263.7	71.7	1.000063
44500.0	166.2	-63.9			276.7	563.5	264.4	71.5	1.000062
45000.0	162.1	-65.1			271.4	561.9	265.2	71.4	1.000060
45500.0	158.0	-66.3			266.2	560.3	266.7	72.2	1.000059
46000.0	154.1	-67.5			261.1	558.7	268.4	73.4	1.000058
46500.0	150.3	-68.7			256.1	557.0	270.7	75.0	1.000057
47000.0	146.5	-69.5			250.6	555.9	273.6	77.2	1.000056
47500.0	142.8	-70.3			245.2	554.9	276.3	79.2	1.000055
48000.0	139.2	-70.0			238.6	555.3	279.0	80.6	1.000053
48500.0	135.6	-69.5			232.1	555.9	281.5	81.8	1.000052

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77
ASCENSION NO. 704 0820 HRS MDT

UPPER AIR DATA
2790010704
HOLLOMAN

TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
49000.0	132.2	-69.1			225.7	556.5	283.6	78.7	1.000050
49500.0	128.9	-68.6			219.5	557.2	285.8	75.7	1.000049
50000.0	125.6	-68.1			213.4	557.8	285.7	69.6	1.000048
50500.0	122.4	-68.5			208.4	557.3	285.0	62.9	1.000046
51000.0	119.3	-69.0			203.6	556.7	282.1	57.3	1.000045
51500.0	116.3	-69.4			198.9	556.1	277.5	52.4	1.000044
52000.0	113.4	-69.9			194.3	555.5	273.7	48.0	1.000043
52500.0	110.5	-70.3			189.8	554.8	271.1	44.1	1.000042
53000.0	107.7	-70.8			185.4	554.2	268.5	40.2	1.000041
53500.0	104.9	-70.8			180.7	554.2	269.7	35.2	1.000040
54000.0	102.3	-70.4			175.7	554.8	271.4	30.3	1.000039
54500.0	99.7	-70.1			171.0	555.2	273.9	27.3	1.000038
55000.0	97.1	-70.5			167.0	554.6	277.0	25.0	1.000037
55500.0	94.6	-71.0			163.0	553.9	279.8	24.0	1.000036
56000.0	92.2	-71.4			159.2	553.3	281.7	24.4	1.000035
56500.0	89.8	-71.9			155.5	552.7	283.4	24.7	1.000035
57000.0	87.5	-72.3			151.9	552.1	284.9	24.7	1.000034
57500.0	85.3	-72.8			148.3	551.5	286.4	24.7	1.000033
58000.0	83.1	-73.2			144.8	550.8	287.4	23.8	1.000032
58500.0	81.0	-72.1			140.4	552.4	288.4	22.9	1.000031
59000.0	79.0	-70.7			135.9	554.3	289.5	21.2	1.000030
59500.0	77.0	-69.3			131.5	556.2	290.8	19.4	1.000029
60000.0	75.0	-67.9			127.3	558.1	295.3	15.9	1.000028
60500.0	73.1	-66.5			123.3	560.0	303.9	12.2	1.000027
61000.0	71.3	-65.1			119.4	561.9	301.5	10.8	1.000027
61500.0	69.5	-64.0			115.8	563.4	290.8	10.8	1.000026
62000.0	67.8	-63.7			112.7	563.8	280.9	11.2	1.000025
62500.0	66.1	-63.4			109.8	564.3	273.0	11.8	1.000024
63000.0	64.5	-63.1			107.0	564.7	266.1	12.6	1.000024
63500.0	62.9	-62.7			104.2	565.1	264.1	11.1	1.000023

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	61.4	-62.4			101.5	565.5	264.1	8.3	1.000023
64500.0	59.9	-62.1			98.8	565.9	264.1	5.8	1.000022
65000.0	58.4	-61.8			96.3	566.4	264.1	5.2	1.000021
65500.0	57.0	-61.5			93.8	566.8	264.1	4.5	1.000021
66000.0	55.6	-61.2			91.3	567.2	264.1	3.6	1.000020
66500.0	54.2	-60.3			88.7	568.4	264.1	2.6	1.000020
67000.0	52.9	-59.3			86.2	569.8	264.1	1.7	1.000019
67500.0	51.6	-58.2			83.7	571.1	264.1	1.4	1.000019
68000.0	50.4	-57.2			81.3	572.5	264.1	1.1	1.000018
68500.0	49.2	-56.8			79.2	573.1	288.1	1.7	1.000018
69000.0	48.0	-56.6			77.2	573.3	299.6	2.5	1.000017
69500.0	46.9	-56.4			75.3	573.6	311.3	3.4	1.000017
70000.0	45.8	-56.2			73.5	573.8	322.0	4.6	1.000016
70500.0	44.7	-56.0			71.7	574.1	328.2	6.0	1.000016
71000.0	43.6	-55.8			69.9	574.3	332.6	6.5	1.000016
71500.0	42.6	-55.6			68.2	574.6	336.5	7.1	1.000015
72000.0	41.6	-55.5			66.5	574.8	343.7	7.4	1.000015
72500.0	40.6	-55.3			64.9	575.1	7.9	7.4	1.000014
73000.0	39.6	-55.1			63.3	575.3	28.3	8.7	1.000014
73500.0	38.7	-54.9			61.8	575.5	42.7	9.9	1.000014
74000.0	37.8	-54.7			60.2	575.8	55.0	10.7	1.000013
74500.0	36.9	-54.5			58.8	576.0	65.2	11.9	1.000013
75000.0	36.0	-54.3			57.3	576.3	71.2	11.4	1.000013
75500.0	35.2	-54.1			55.9	576.5	77.2	10.3	1.000012
76000.0	34.3	-54.0			54.5	576.8	84.6	9.2	1.000012
76500.0	33.5	-53.8			53.2	577.0	88.4	8.6	1.000012
77000.0	32.7	-53.6			51.9	577.3	92.7	8.0	1.000012
77500.0	31.9	-53.4			50.6	577.5	97.7	7.4	1.000011
78000.0	31.2	-53.2			49.4	577.8	103.5	6.7	1.000011
78500.0	30.4	-53.0			48.2	578.0	110.9	6.0	1.000011

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
79000.0	29.7	-52.8			47.0	578.2	120.1	5.4	1.000010
79500.0	29.0	-52.7			45.9	578.4	122.1	5.1	1.000010
80000.0	28.3	-52.6			44.8	578.6	116.9	4.9	1.000010
80500.0	27.7	-52.4			43.7	578.8	111.5	4.8	1.000010
81000.0	27.0	-52.3			42.6	579.0	104.8	5.0	1.000009
81500.0	26.4	-52.1			41.6	579.2	97.0	5.7	1.000009
82000.0	25.8	-52.0			40.6	579.3	90.9	6.5	1.000009
82500.0	25.2	-51.9			39.6	579.5	86.5	7.2	1.000009
83000.0	24.6	-51.7			38.7	579.7	85.8	6.6	1.000009
83500.0	24.0	-51.6			37.8	579.9	84.9	6.0	1.000008
84000.0	23.5	-51.4			36.9	580.1	83.9	5.4	1.000008
84500.0	22.9	-51.3			36.0	580.3	79.5	5.8	1.000008
85000.0	22.4	-51.2			35.1	580.4	75.3	6.4	1.000008
85500.0	21.8	-51.0			34.3	580.6	71.8	7.1	1.000008
86000.0	21.3	-50.9			33.4	580.8	75.5	8.7	1.000007
86500.0	20.8	-50.7			32.6	581.0	80.4	10.9	1.000007
87000.0	20.3	-50.6			31.9	581.2	83.6	13.2	1.000007
87500.0	19.9	-50.4			31.1	581.4	87.3	14.4	1.000007
88000.0	19.4	-50.1			30.3	581.8	91.5	14.8	1.000007
88500.0	19.0	-49.8			29.6	582.3	95.5	15.4	1.000007
89000.0	18.5	-49.4			28.9	582.7	97.3	15.8	1.000006
89500.0	18.1	-49.1			28.2	583.1	97.1	15.9	1.000006
90000.0	17.7	-48.8			27.5	583.6	97.0	16.1	1.000006
90500.0	17.3	-48.5			26.8	584.0	94.7	15.9	1.000006
91000.0	16.9	-48.1			26.1	584.4	88.8	15.3	1.000006
91500.0	16.5	-47.8			25.5	584.8	82.5	14.8	1.000006
92000.0	16.1	-47.5			24.9	585.2	76.6	14.7	1.000006
92500.0	15.7	-47.1			24.3	585.7	72.3	14.7	1.000005
93000.0	15.4	-46.8			23.7	586.1	68.0	14.9	1.000005
93500.0	15.0	-46.5			23.1	586.5	65.5	15.0	1.000005

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

UPPER AIR DATA
2790010704
HOLLOMAN
TABLE VIII. (CONT)

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
94000.0	14.7	-46.2			22.5	586.9	69.9	15.0	1.000005
94500.0	14.5	-45.8			22.0	587.4	74.2	15.0	1.000005
95000.0	14.0	-45.7			21.5	587.5	77.9	15.1	1.000005
95500.0	13.7	-45.6			21.0	587.7	74.6	16.1	1.000005
96000.0	13.4	-45.5			20.5	587.8	71.6	17.0	1.000005
96500.0	13.1	-45.4			20.0	588.0	68.9	18.1	1.000004
97000.0	12.8	-45.2			19.5	588.1	69.9	15.7	1.000004
97500.0	12.5	-45.1			19.1	588.3	71.7	13.0	1.000004
98000.0	12.2	-45.0			18.6	588.4	74.3	10.4	1.000004
98500.0	11.9	-44.9			18.2	588.6	90.2	8.7	1.000004
99000.0	11.7	-44.8			17.8	588.7	113.0	8.4	1.000004
99500.0	11.4	-44.7			17.4	588.9	133.9	9.5	1.000004
100000.0	11.1	-44.5			17.0	589.0			1.000004
100500.0	10.9	-44.4			16.6	589.2			1.000004
101000.0	10.6	-44.3			16.2	589.3			1.000004
101500.0	10.4	-44.2			15.8	589.5			1.000004
102000.0	10.2	-44.1			15.4	589.6			1.000003

STATION ALTITUDE 4126.59 FEET MSL
6 OCT. 77 0820 HRS MDT
ASCENSION NO. 704

MANDATORY LEVELS
2790010704
HOLLOMAN
TABLE IX.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES	CENTIGRADE		DEGREES(TN)	KNOTS
850.0	5110.	19.9	15.5	76.	168.9	8.1
800.0	6818.	15.7	13.0	84.	174.6	14.1
750.0	8608.	11.3	10.1	93.	180.8	11.9
700.0	10495.	8.9	1.6	60.	214.0	6.4
650.0	12501.	5.9	-.8	62.	230.6	15.9
600.0	14638.	1.7	-4.6	63.	229.2	19.5
550.0	16921.	-3.5	-5.2	88.	233.2	23.5
500.0	19375.	-8.4	-11.7	77.	258.9	27.3
450.0	22045.	-12.6	-18.5	61.	248.2	32.1
400.0	24959.	-18.7	-27.6	45.	259.4	34.5
350.0	28189.	-24.8	-41.9	18.	260.8	45.1
300.0	31810.	-32.7			266.5	49.8
250.0	35941.	-42.1			268.2	67.5
200.0	40773.	-53.5			265.3	70.9
175.0	43541.	-61.4			263.5	70.6
150.0	46622.	-68.8			272.0	76.0
125.0	50193.	-68.1			285.3	65.4
100.0	54554.	-70.0			275.1	26.4
80.0	58872.	-71.4			289.6	21.1
70.0	61508.	-64.1			286.8	10.9
60.0	64619.	-62.1			264.1	5.4
50.0	68351.	-56.9			290.4	1.8
40.0	73007.	-55.2			36.3	9.7
30.0	79065.	-52.9			123.4	5.1
25.0	82933.	-51.8			85.4	6.3
20.0	87693.	-50.5			92.1	14.9
15.0	93904.	-46.5			72.7	15.0
10.0	102792.	-44.0				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

SIGNIFICANT LEVEL DATA
2790020725
WHITE SANDS
TABLE X.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
883.0	3989.0	17.7	16.9	95.0
876.8	4217.7	19.4	16.2	82.0
850.0	5098.4	19.9	16.3	80.0
805.3	6619.0	15.4	11.4	77.0
765.8	8016.4	12.9	11.3	90.0
746.8	8709.6	11.9	7.0	72.0
737.8	9043.2	11.9	4.4	60.0
700.0	10482.2	9.1	2.9	65.0
586.8	15206.7	.4	-2.8	79.0
560.3	16418.1	-2.3	-3.9	89.0
500.0	19359.2	-7.3	-7.7	97.0
461.3	21404.4	-11.1	-11.5	97.0
450.1	22022.6	-11.9	-15.3	76.0
430.8	23115.1	-15.4	-19.4	71.0
409.3	24375.3	-18.2	-24.4	58.0
400.0	24937.8	-18.2	-24.0	60.0
389.3	25599.7	-19.5	-23.0	70.0
376.8	26368.1	-23.3	-43.9	13.0
326.0	29754.8	-29.8	-49.2	13.0
312.0	30769.0	-30.8		
308.3	31110.2	-31.7		
300.0	31739.0	-33.9		
250.0	35846.8	-42.2		
200.0	40651.0	-54.6		
150.0	46451.8	-70.5		
138.3	48016.4	-73.2		
127.3	49619.3	-68.9		
114.3	51716.2	-70.5		
101.9	53916.5	-75.2		
100.0	54274.7	-73.2		

STATION ALTITUDE 3989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

SIGNIFICANT LEVEL DATA
279002025
WHITE SANDS
TABLE X. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
32.5	57993.9	-73.3		
70.0	61105.1	-70.4		
62.5	63322.8	-66.4		
50.0	67821.2	-57.9		
30.0	76362.3	-55.3		
20.0	86863.8	-52.4		
14.5	93729.8	-45.9		

STATION ALTITUDE 3989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
2790020725
WHITE SANDS
TABLE XI.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	833.8	17.7	16.9	95.0	1049.8	667.2	300.0	2.9	1.000320
4000.0	833.5	17.8	16.9	94.4	1049.2	667.2	299.2	2.9	1.000320
4500.0	808.1	19.6	16.5	81.4	1024.6	669.2	212.5	1.7	1.000310
5000.0	783.0	19.8	16.3	80.2	1005.8	669.6	171.9	4.4	1.000306
5500.0	758.0	18.7	15.0	79.2	992.5	668.1	163.2	7.5	1.000297
6000.0	733.2	17.2	13.4	78.2	980.6	668.2	161.6	9.0	1.000288
6500.0	708.7	15.8	11.8	77.2	968.9	664.3	162.4	9.2	1.000279
7000.0	684.5	14.7	11.4	80.5	955.1	663.1	167.6	9.2	1.000275
7500.0	660.6	13.8	11.4	85.2	940.9	662.1	174.1	9.3	1.000272
8000.0	636.9	12.9	11.3	89.8	926.9	661.1	180.1	8.3	1.000269
8500.0	613.5	12.2	8.4	77.4	913.6	659.9	186.6	7.4	1.000255
9000.0	589.0	11.9	4.8	61.6	899.1	659.2	186.8	6.5	1.000240
9500.0	565.6	11.0	3.9	61.6	885.8	658.1	189.7	6.0	1.000235
10000.0	542.4	10.0	3.4	63.3	872.8	657.0	199.9	6.5	1.000231
10500.0	519.5	9.1	2.9	65.1	860.0	655.8	209.0	7.5	1.000227
11000.0	496.8	8.1	2.3	66.5	846.9	654.7	216.4	9.3	1.000223
11500.0	474.9	7.2	1.7	68.0	834.1	653.6	222.1	11.5	1.000219
12000.0	453.4	6.3	1.1	69.5	821.4	652.5	226.5	14.1	1.000215
12500.0	432.2	5.4	.6	71.0	809.0	651.4	228.1	16.3	1.000211
13000.0	411.4	4.5	-.0	72.5	796.7	650.3	228.9	18.2	1.000207
13500.0	391.0	3.5	-.7	73.9	784.6	649.2	228.9	19.4	1.000204
14000.0	370.8	2.6	-1.3	75.4	772.6	648.1	228.7	20.5	1.000200
14500.0	351.0	1.7	-1.9	76.9	761.1	646.9	230.3	20.9	1.000196
15000.0	331.5	.8	-2.5	78.4	749.6	645.8	231.9	21.3	1.000193
15500.0	312.3	-.3	-3.0	81.4	738.4	644.6	231.7	22.0	1.000189
16000.0	293.5	-1.4	-3.5	85.5	727.4	643.3	231.4	22.7	1.000186
16500.0	275.0	-2.4	-4.0	89.2	716.5	642.0	231.2	22.5	1.000183
17000.0	256.8	-3.3	-4.6	90.6	705.1	640.9	231.5	22.3	1.000180
17500.0	239.0	-4.1	-5.2	91.9	693.8	639.9	233.8	21.4	1.000176
18000.0	221.6	-5.0	-5.9	93.3	682.7	638.9	236.5	21.3	1.000173

STATION ALTITUDE 5939.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
2790020725
WHITE SANDS
TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
18500.0	516.9	-5.8	-6.6	94.7	671.6	637.6	239.3	22.1	1.000170
19000.0	507.0	-6.7	-7.2	96.0	661.1	636.8	241.0	22.9	1.000166
19500.0	497.2	-7.6	-8.0	97.0	650.5	635.7	241.8	23.6	1.000163
20000.0	487.5	-8.5	-8.9	97.0	640.2	634.5	243.2	23.9	1.000160
20500.0	478.0	-9.4	-9.8	97.0	630.0	633.4	245.3	23.7	1.000156
21000.0	468.7	-10.3	-10.7	97.0	620.0	632.2	248.2	24.0	1.000153
21500.0	459.6	-11.2	-12.0	93.8	610.0	631.1	252.0	24.7	1.000149
22000.0	450.5	-11.9	-15.1	76.8	599.7	630.2	254.6	25.5	1.000144
22500.0	441.6	-13.4	-17.1	73.8	591.5	628.3	254.9	26.5	1.000141
23000.0	432.8	-15.0	-19.0	71.5	583.4	626.3	254.6	27.2	1.000138
23500.0	424.1	-16.5	-20.9	67.0	574.5	624.7	252.1	27.6	1.000135
24000.0	415.6	-17.4	-22.9	61.9	565.5	623.3	252.9	28.4	1.000132
24500.0	407.2	-18.2	-24.3	58.4	556.0	622.3	254.4	29.3	1.000129
25000.0	399.0	-18.3	-24.0	60.9	545.0	622.2	256.6	30.4	1.000127
25500.0	390.9	-19.3	-23.6	68.5	536.0	621.0	258.6	31.4	1.000125
26000.0	382.9	-21.4	-31.1	41.1	529.7	618.2	260.1	32.0	1.000121
26500.0	375.0	-23.5	-44.1	13.0	523.3	615.6	261.4	32.7	1.000117
27000.0	367.2	-24.5	-44.9	13.0	514.3	614.4	262.1	33.8	1.000115
27500.0	359.5	-25.4	-45.7	13.0	505.5	613.2	261.6	35.5	1.000113
28000.0	352.0	-26.4	-46.4	13.0	496.9	612.0	260.4	37.6	1.000111
28500.0	344.6	-27.4	-47.2	13.0	488.4	610.8	259.2	40.1	1.000109
29000.0	337.4	-28.3	-43.0	13.0	480.1	609.6	258.1	42.5	1.000107
29500.0	330.3	-29.3	-48.8	13.0	471.9	608.4	258.8	44.9	1.000106
30000.0	323.4	-30.0	-51.7	9.9**	463.4	607.5	259.6	46.9	1.000104
30500.0	316.5	-30.5	-60.2	3.6**	454.4	606.8	261.3	46.9	1.000101
31000.0	309.8	-31.4			446.4	605.7	263.1	46.9	1.000099
31500.0	303.1	-33.1			439.6	603.6	265.3	47.1	1.000098
32000.0	296.5	-34.4			432.7	601.9	266.9	47.7	1.000096
32500.0	290.0	-35.4			425.0	600.6	268.2	48.5	1.000095
33000.0	283.7	-36.4			417.5	599.4	267.1	49.4	1.000093

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3969.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
279002U725
WHITE SANDS

TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
33500.0	277.5	-37.5			410.1	596.1	265.9	50.4	1.000091
34000.0	271.4	-38.5			402.8	596.8	264.5	52.3	1.000090
34500.0	265.4	-39.5			395.7	595.5	263.2	54.3	1.000088
35000.0	259.6	-40.5			388.7	594.2	262.1	58.5	1.000087
35500.0	253.9	-41.5			381.8	592.9	261.2	62.7	1.000085
36000.0	248.2	-42.6			375.1	591.5	261.7	63.2	1.000084
36500.0	242.5	-43.9			368.5	589.9	262.3	63.7	1.000082
37000.0	237.0	-45.2			362.1	588.2	263.7	61.3	1.000081
37500.0	231.5	-46.5			355.8	586.5	265.3	58.8	1.000079
38000.0	226.2	-47.8			349.6	584.9	265.8	60.5	1.000078
38500.0	221.0	-49.0			343.6	583.2	266.3	62.7	1.000077
39000.0	215.9	-50.3			337.8	581.5	266.2	64.9	1.000075
39500.0	211.0	-51.6			331.8	579.8	266.0	67.0	1.000074
40000.0	206.1	-52.9			326.1	578.1	265.5	66.6	1.000073
40500.0	201.4	-54.2			320.5	576.4	264.8	64.9	1.000071
41000.0	196.8	-55.6			314.7	574.7	264.1	63.0	1.000070
41500.0	192.3	-56.9			308.9	572.9	263.5	61.2	1.000069
42000.0	187.1	-58.3			303.3	571.0	263.1	61.8	1.000068
42500.0	182.5	-59.7			297.8	569.2	262.9	63.4	1.000066
43000.0	178.0	-61.0			292.4	567.4	264.5	63.9	1.000065
43500.0	173.6	-62.4			287.0	565.5	266.6	64.1	1.000064
44000.0	169.4	-63.8			281.8	563.7	268.4	63.9	1.000063
44500.0	165.2	-65.2			276.8	561.9	270.2	63.6	1.000062
45000.0	161.2	-66.5			271.8	560.0	271.3	64.6	1.000061
45500.0	157.3	-67.9			266.9	558.1	272.4	65.7	1.000059
46000.0	153.4	-69.3			262.1	556.3	274.8	66.3	1.000058
46500.0	149.6	-70.6			257.3	554.5	277.1	67.0	1.000057
47000.0	145.8	-71.4			251.8	553.3	279.4	67.1	1.000056
47500.0	142.1	-72.3			246.4	552.1	281.6	67.2	1.000055
48000.0	138.4	-73.2			241.1	550.9	283.1	68.4	1.000054

STATION ALTITUDE 5989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
279002072S
WHITE SANDS
TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
48500.0	134.9	-71.9			233.5	552.7	284.4	69.6	1.000052
49000.0	131.4	-70.6			226.6	554.5	284.5	66.0	1.000050
49500.0	128.1	-69.2			218.8	556.3	284.5	62.2	1.000049
50000.0	124.8	-69.2			213.2	556.4	283.8	56.8	1.000047
50500.0	121.7	-69.6			208.2	555.9	282.0	49.6	1.000046
51000.0	118.6	-70.0			203.3	555.3	279.6	42.4	1.000045
51500.0	115.6	-70.3			198.5	554.8	275.9	38.6	1.000044
52000.0	112.6	-71.1			194.2	553.8	271.5	35.0	1.000043
52500.0	109.7	-72.2			190.2	552.3	268.7	33.0	1.000042
53000.0	106.9	-73.2			186.3	550.8	266.7	31.7	1.000041
53500.0	104.1	-74.3			182.4	549.3	265.8	30.8	1.000041
54000.0	101.5	-74.7			178.1	548.8	266.5	30.4	1.000040
54500.0	98.8	-73.2			172.2	550.8	267.3	30.1	1.000038
55000.0	96.3	-73.3			167.8	550.7	268.7	30.4	1.000037
55500.0	93.8	-73.4			163.6	550.6	270.1	30.7	1.000036
56000.0	91.4	-73.5			159.4	550.5	269.9	31.0	1.000035
56500.0	89.0	-73.6			155.3	550.4	269.6	31.4	1.000035
57000.0	86.7	-73.6			151.4	550.3	272.7	32.0	1.000034
57500.0	84.5	-73.7			147.5	550.2	276.9	32.8	1.000033
58000.0	82.3	-73.8			143.8	550.1	281.4	29.7	1.000032
58500.0	80.2	-73.2			139.7	550.8	288.8	22.3	1.000031
59000.0	78.1	-72.7			135.7	551.6	298.4	15.6	1.000030
59500.0	76.1	-72.2			131.9	552.3	293.5	9.5	1.000029
60000.0	74.1	-71.6			128.2	553.1	272.1	3.7	1.000029
60500.0	72.2	-71.1			124.5	553.8	264.1	7.1	1.000028
61000.0	70.4	-70.5			121.0	554.6	262.5	11.0	1.000027
61500.0	68.6	-69.7			117.5	555.7	266.1	12.2	1.000026
62000.0	66.9	-68.8			114.0	556.9	271.8	12.2	1.000025
62500.0	65.2	-67.9			110.6	558.2	274.4	12.4	1.000025
63000.0	63.5	-67.0			107.4	559.4	272.2	12.7	1.000024

STATION ALTITUDE 3989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
2790020725
WHITE SANDS
TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
03500.0	62.0	-66.1			104.2	560.6	270.7	12.4	1.000023
04000.0	60.4	-65.1			101.2	561.9	275.0	7.5	1.000023
04500.0	59.0	-64.2			98.3	563.2	295.0	2.8	1.000022
05000.0	57.5	-63.2			95.4	564.4	324.3	1.7	1.000021
05500.0	56.1	-62.3			92.7	565.7	341.1	1.6	1.000021
06000.0	54.7	-61.3			90.0	567.0	316.3	2.0	1.000020
06500.0	53.4	-60.4			87.4	568.2	286.0	4.3	1.000019
07000.0	52.1	-59.5			84.9	569.5	277.8	6.8	1.000019
07500.0	50.8	-58.5			82.5	570.8	287.7	4.3	1.000018
08000.0	49.6	-57.9			80.2	571.6	318.0	2.3	1.000018
08500.0	48.4	-57.7			78.2	571.8	340.8	1.9	1.000017
09000.0	47.2	-57.6			76.3	572.0	331.4	1.9	1.000017
09500.0	46.1	-57.5			74.5	572.1	331.5	1.9	1.000017
10000.0	45.0	-57.4			72.6	572.3	34.5	2.3	1.000016
10500.0	43.9	-57.2			70.9	572.4	57.9	4.2	1.000016
11000.0	42.9	-57.1			69.1	572.6	80.1	7.0	1.000015
11500.0	41.8	-57.0			67.4	572.8	89.4	10.2	1.000015
12000.0	40.8	-56.9			65.8	572.9	70.9	12.7	1.000015
12500.0	39.9	-56.7			64.2	573.1	71.0	11.3	1.000014
13000.0	38.9	-56.6			62.6	573.3	71.1	9.9	1.000014
13500.0	38.0	-56.5			61.1	573.4	71.5	8.4	1.000014
14000.0	37.1	-56.4			59.6	573.6	73.7	6.6	1.000013
14500.0	36.2	-56.3			58.1	573.7	77.4	4.9	1.000013
15000.0	35.3	-56.1			56.7	573.9	83.2	3.5	1.000013
15500.0	34.5	-56.0			55.3	574.1	81.5	4.0	1.000012
16000.0	33.7	-55.9			54.0	574.2	80.1	4.4	1.000012
16500.0	32.9	-55.8			52.7	574.4	78.9	4.7	1.000012
17000.0	32.1	-55.6			51.4	574.6	76.5	4.0	1.000011
17500.0	31.3	-55.5			50.1	574.7	73.0	3.3	1.000011
18000.0	30.6	-55.4			48.9	574.9	69.3	2.8	1.000011

STATION ALTITUDE 5989.00 FEET MSL
0 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
2790020725
WHITE SANDS
TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
78500.0	29.8	-55.3			47.7	575.1	75.3	3.8	1.000011
79000.0	29.1	-55.1			46.3	575.3	76.0	4.8	1.000010
79500.0	28.4	-54.9			45.4	575.5	77.6	5.9	1.000010
80000.0	27.8	-54.7			44.3	575.7	78.8	7.6	1.000010
80500.0	27.1	-54.6			43.2	576.0	79.5	9.3	1.000010
81000.0	26.5	-54.4			42.2	576.2	80.0	11.0	1.000009
81500.0	25.8	-54.2			41.1	576.4	79.8	10.2	1.000009
82000.0	25.2	-54.1			40.1	576.6	79.6	9.5	1.000009
82500.0	24.6	-53.9			39.1	576.9	79.3	8.8	1.000009
83000.0	24.1	-53.7			38.2	577.1	78.9	8.5	1.000008
83500.0	23.5	-53.6			37.3	577.3	78.3	8.3	1.000008
84000.0	22.9	-53.4			36.4	577.5	77.8	8.1	1.000008
84500.0	22.4	-53.2			35.5	577.8	78.3	8.5	1.000008
85000.0	21.9	-53.0			34.6	578.0	79.6	9.3	1.000008
85500.0	21.3	-52.9			33.8	578.2	80.7	10.1	1.000008
86000.0	20.8	-52.7			32.9	578.4	80.8	10.7	1.000007
86500.0	20.4	-52.5			32.1	578.7	79.1	11.2	1.000007
87000.0	19.9	-52.3			31.3	579.0	77.6	11.6	1.000007
87500.0	19.4	-51.8			30.6	579.6	76.3	12.0	1.000007
88000.0	19.0	-51.3			29.8	580.2	78.4	12.1	1.000007
88500.0	18.5	-50.9			29.0	580.8	80.5	12.2	1.000006
89000.0	18.1	-50.4			28.3	581.5	82.5	12.3	1.000006
89500.0	17.7	-49.9			27.6	582.1	83.0	12.4	1.000006
90000.0	17.3	-49.4			26.9	582.7	83.1	12.5	1.000006
90500.0	16.9	-49.0			26.2	583.3	83.1	12.5	1.000006
91000.0	16.5	-48.5			25.6	583.9			1.000006
91500.0	16.1	-48.0			24.9	584.5			1.000006
92000.0	15.7	-47.5			24.3	585.2			1.000005
92500.0	15.4	-47.1			23.7	585.8			1.000005
93000.0	15.0	-46.6			23.1	586.4			1.000005

STATION ALTITUDE 3989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

UPPER AIR DATA
2790020725
WHITE SANDS
TABLE XI. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
93500.0	14.7	-46.1			22.5	587.0			1.000005

STATION ALTITUDE 5989.00 FEET MSL
6 OCT. 77 0825 HRS MDT
ASCENSION NO. 725

MANDATORY LEVELS
27900207E5
WHITE SANDS
TABLE XII.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5097.	19.9	16.3	80.	169.3	5.0
800.0	6802.	15.1	11.4	79.	165.3	9.2
750.0	8591.	12.1	7.8	75.	180.6	7.2
700.0	10482.	9.1	2.9	65.	208.8	7.4
650.0	12487.	5.4	.6	71.	228.1	16.2
600.0	14622.	1.5	-2.0	77.	230.7	21.0
550.0	16907.	-3.1	-4.5	90.	231.1	22.4
500.0	19368.	-7.3	-7.7	97.	241.6	23.5
450.0	22041.	-11.9	-15.3	76.	254.6	25.7
400.0	24955.	-18.2	-24.0	60.	256.5	30.3
350.0	28168.	-26.7	-46.7	15.	259.9	38.6
300.0	31772.	-33.9			266.5	47.4
250.0	35891.	-42.2			261.7	63.2
200.0	40710.	-54.6			264.4	63.8
175.0	43466.	-62.0			266.8	64.2
150.0	46533.	-70.5			277.7	67.0
125.0	50071.	-69.2			283.2	54.0
100.0	54390.	-73.2			267.4	30.1
80.0	58671.	-73.2			297.2	17.7
70.0	61255.	-70.4			265.3	12.2
60.0	64299.	-64.8			294.7	2.6
50.0	68009.	-57.9			345.8	1.9
40.0	72637.	-56.8			71.1	10.2
30.0	78640.	-55.3			75.7	4.6
25.0	82466.	-54.0			79.1	8.6
20.0	87185.	-52.4			76.5	12.0
15.0	93568.	-46.6				